

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A system operable to generate a message related to a control unit of an automation system, the system comprising:

a data transmission system in communication with the control unit and in further communication with a receiving device,

wherein the message is an e-mail message generated in response to an operation of the automation system and the data transmission system is an Intranet and/or the Internet and the control unit comprises means for generating the message for a specific receiving device addressable with a pre-defined address and, wherein further the message has an address field to identify a recipient of the corresponding message, and the receiving device has means to receive the message sent by the control unit and automatically respond to the message,

wherein the control unit monitors and controls operation of the automation system and in response to a fault detected in the automation system, generates the e-mail message.

2. (original): The system as claimed in claim 1, wherein the message has an identification field for inserting a message identification that is individually assigned to each message and the control unit comprises means to receive an acknowledgment returned by the receiving device which is intended for the control unit, said acknowledgment comprising the

identification associated with the message as an acknowledgment identification, and the control unit further comprising means to compare the acknowledgment identification contained in acknowledgment with the message identification contained in the transmitted message.

3. (original): A system as claimed in claim 2, wherein the control unit further comprises means for marking the message as acknowledged if the means to compare determines that the control unit has received an acknowledgment with the message identification assigned to the associated transmitted message.

4. (original): A system as claimed in claim 1, wherein the control unit is a stored-program control unit.

5. (currently amended): A control unit of an automation system comprising a transmitting device operable to generate and transmit an alarm or fault message of the automation system, via a data transmission system, to a receiving device capable of being linked to said data transmission system, wherein the transmitting device comprises means to generate the message as an e-mail message directed through the data transmission system embodied as an Intranet and/or the Internet, wherein the message comprises an address field to identify a recipient of the corresponding message and wherein the automation system comprises equipment of a production or a manufacturing process.

6. (original): A control unit as claimed in claim 5, wherein said control unit is a stored-program control unit.

7. (original): A control unit as claimed in claim 5, wherein the message comprises an identification field for a message identification individually assigned to each message, the control unit further comprising;

means to receive an acknowledgment returned by the receiving device to the control unit, said acknowledgment comprising the identification associated with the underlying message as the acknowledgment identification, and

means to compare the identification contained in the acknowledgment with the identification contained in the transmitted message.

8. (currently amended): A method for producing a message of a control unit of an automation system, the method comprising:

sending the message via a data system to a receiving device capable of being linked to the data system, wherein the message is an e-mail message transmitted via an Intranet and/or the Internet to a predetermined receiving device, and wherein the e-mail message is generated in response to an operation of the automation system, and

wherein the automation system comprises equipment of a production or a manufacturing process.

9. (original): The method as claimed in claim 8, wherein the control unit enters a message identification individually assigned to each message into an identification field of the message and the receiving device, after receipt of a message, automatically generates and returns an acknowledgment to the control unit, wherein said acknowledgment contains the identification associated with the underlying message as the acknowledgment identification, and the control unit compares the acknowledgment identification contained in the acknowledgment with the message identification contained in the transmitted message.

10. (original): The method as claimed in claim 7, wherein receipt of a message is confirmed in the control unit if the control unit received an acknowledgment with the message identification assigned to the associated message.

11. (original): The method as claimed in claim 7, wherein the method is used to generate a fault and/or alarm message of a stored-program control unit, a numerical control unit and/or a robot control unit in connection with an automation system.

12. - 26. (canceled).

27. (previously presented): The system according to claim 1, wherein the acknowledgement message provides the control unit with instructions to execute a predetermined action in response to the detected fault.

28. (currently amended): The system according to claim 1, wherein the response to the message comprises control commands in a programming language and wherein said control commands influence at least one operation of the automation system.

29. (previously presented): The system according to claim 28, wherein the control commands are automatically executed by the control unit.

30. (previously presented): The system according to claim 1, wherein when the control unit receives the response from the receiving device, the status of the e-mail message is automatically changed to acknowledged enabling management of the e-mail message.

31. (previously presented): The system according to claim 1, wherein the e-mail message is an alarm message generated in response to the operation of the automation system when the control unit detects at least one of a fault occurring in the automation system and an attainment of a predetermined threshold related to the operation of the automation system.

32. (currently amended): The system according to claim 1, wherein the receiving device automatically responds to the message by sending the control unit a reply message and wherein the control unit is a numerical controller.